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ABSTRACT

This investigation is designed to help students learn landmarks and possible dangers for settlers who traveled down the Ohio River in 1789. The document describes a simulation in which the students attempt to survive a flatboat trip from Pittsburgh (Pennsylvania) to Losantiville (Cincinnati, Ohio). Along the trail are points of historical interest. At each site the students can find out more about the river and the lives of the people who used it as a route into the interior of the continent. The activities in the student booklet are designed to enable students to: (1) list the natural and human factors that determined whether a flatboat family could survive a river trek in 1789; (2) use compass directions and distances to plot a map of a portion of the Ohio River; (3) describe some events and people important to Ohio's history in the late 1700s; (4) identify the modern names of towns and tributaries along the Ohio River; and (5) follow directions carefully to complete a computer program. The teacher guide includes the same activities as the student booklet, but is supplemented with some additional background information, a list of references, and the answers to the review questions for students. (TW)

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River Trek

by
Roger Eddy, Marietta Public Schools, Ohio
and
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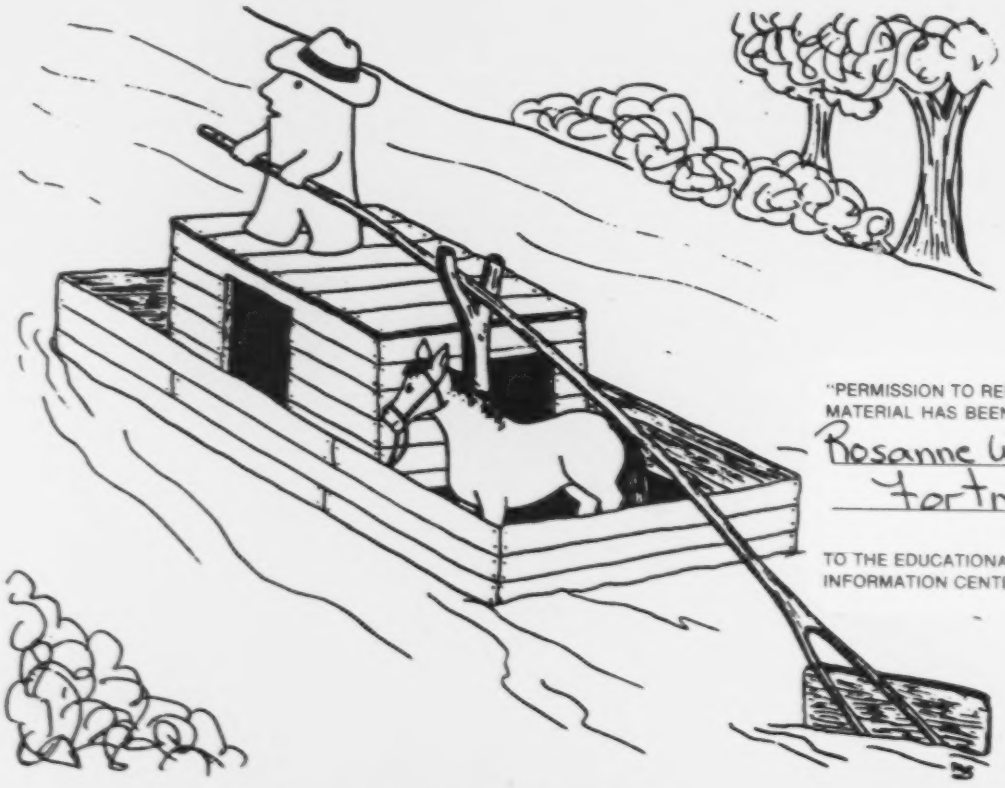
Computer Simulation by Christopher N. Fortner



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TEACHER GUIDE

OEAGLS–Oceanic Education Activities for Great Lakes Schools

SE 048 328

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OEAGLS Investigation #26

Completed June 1987

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TEACHER GUIDE

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TEACHER GUIDE
RIVER TREK

by

Roger Eddy, Marietta (OH) Schools
and Rosanne Fortner, The Ohio State University
Computer Simulation by Christopher N. Fortner
Ohio Sea Grant Education Program

OVERVIEW

A major objective of River Trek is to learn landmarks and possible dangers for settlers travelling down the Ohio River in 1789. Students attempt to survive a flatboat trip from Pittsburgh to Losantiville (Cincinnati).

Along the trail are points of historical interest and decision points as well. At each site students can learn more about the river and the lives of people who used it as a route into the interior of the continent.

PREREQUISITE STUDENT BACKGROUND

Multiplication and division by 5, ability to identify and follow compass directions on a map, ability to read a map.

MATERIALS

River Trek disk, Apple][computer with color monitor, road map of Ohio, graph paper labeled "River Trek Route" (in Student Guide), 4-inch by 4-square strip of their graph paper to use as a ruler, Ohio history books as needed for reference.

SUGGESTED APPROACH

Activities A and B can be done concurrently if students can be trusted to stay on task. Most, however, prefer to concentrate on the computer program without coordinating with Activity B at the same time. Doing Activity A with a careful listing of distances and directions (Procedure 5) will alow students to complete Activity B without reviewing the program. If A and B are done together they will take about one class period of 45 minutes.

As a follow-up for the computer program and its analysis, Activity C brings the geographic region of the Trek into modern times by renaming the sites with their modern names. This can lead to review of Ohio history already studied, or it can be used as an introduction to the rapidly changing frontier of the Northwest Ordinance.

EXTENSIONS

If your school is near one of the features or sites introduced on the Trek, a visit to it or to a historical museum will enhance learning. For example, the Ohio River Museum and Campus Martius in Marietta, Ohio, have many experiences to offer regarding early days on the Ohio River. Prepare a worksheet to be done at your chosen site to relate the trip to the classroom instruction.

The Ohio Humanities Council has a videotape entitle "Flatboat to Towboat: Ohio River Tradition." It can be rented for $2.50 from the Humanities Resource Center, Capital University IMC, 2199 E. Main St., Columbus, OH 43209. It can also be purchased from its project director for $55 for 1/2 inch VHS or BETA, $80 for 3/4 inch Umatic. Purchase orders should be sent to Dorothy Weil, 8 Belsaw Place, Cincinnati, OH 45220.

Younger students may enjoy building a flatboat using the instruction in Extension Activity D.

NOTE: Information to teachers in enclosed in boxes in this guide.

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INTRODUCTION

Ohio's two natural waterways, the Ohio River and Lake Erie, formed transportation routes into the Northwest Territory. Early pioneers and scouts came to this region by canoes. However, the canoe was unable to meet the needs of families emigrating to the Ohio region. In addition to family members, emigrants needed to transport livestock, seeds, plows, tools and other necessities for starting a new home. Flatboats became the most popular form of transportation during the late 1700s and early 1800s.

Flatboats were built of wood planks held together by pegs. The typical size flatboat was 40 feet long, 12 to 14 feet wide, with sides 2 to 4 feet high. Flatboats usually had a building on them with the front part housing the family and the rear portion housing the animals. The boats were designed for a one-way journey. When the emigrants arrived at their destination, the lumber was used to build a shelter for the family.

There were no engines in flatboat days. Moving down the river depended on the river's current. Since the Ohio River during this time was quite shallow, emigrants would wait for early spring floods to carry them downstream. Most flatboats contained only a long pole or **sweep** with which to steer. The sweep was about 20 feet long. If the flatboat got stuck on a sandbar, a **hawser** or strong rope was used in addition to the sweep. The hawser was attached to a tree on shore while a reel on board the boat wound in the rope. As the rope was wound up shorter and shorter, the boat was pulled off the sandbar and toward the shore. If the hawser failed or no trees were within reach, the boat remained stranded until a strong current could lift it away.

What other kinds of perils did the flatboaters face in the 18th Century? Could you have survived a river trek during that period? What was going on in Ohio during the time of the flatboat? How have the areas along the Ohio River changed since flatboat days?

OBJECTIVES

When you have completed this activity you will be able to:

1. List the natural and the human factors that determined whether a flatboat family survived a river trek in 1789.
2. Use compass directions and distances to plot a map of the Ohio and West Virginia portions of the Ohio River.
3. Describe some events and people important to Ohio's history in the late 1700's.
4. Identify the modern names of towns and tributaries along the Ohio River.
5. Follow directions carefully to complete a computer game.

ACTIVITY A: WHAT WAS A FLATBOAT TRIP LIKE?

KEYWORDS: flatboat, simulation, echo location.

Did you ever dream of building a raft and setting off on an adventure down the river the way Tom Sawyer did? What would you take with you? What dangers would you face? Could you make the quick decisions necessary to survive?

In this activity you will take a computer simulated trip down the Ohio on a flatboat in 1789. Some of the people, events and natural elements you face will be a real challenge, just as they were in the flatboat days. Good luck and smooth sailing!

MATERIALS: River Trek disk, Apple][computer with one disk drive, color monitor, pencil and paper.

PROCEDURE

1. Up to four people may work together at one computer. You can also do the simulation alone. Get the River Trek disk from your teacher and put it, label side up, into the disk drive. Close the door of the drive. If your computer has two disk drives, use only Drive 1.

2. If you have an Apple][e or][c, push the CAPS LOCK key down. Read instructions 3-6 below before you begin the simulation.

3. Boot the disk. It will take about a minute to load the program into the computer's memory. Read the introductory screens carefully to find out what the simulation is about and how to begin.

4. On the screens that have pictures, you will have instructions and information just below the picture. Unless you are told to do differently, press the RETURN key to get a new screen and continue the simulation.

There is no way to go back to screens you have already passed. Your flatboat has no motor, and going upstream is nearly impossible with only your sweep for power. Flatboaters who wanted to go back to a town they had passed would have to pole to shore and walk. After some events in the trek you may be allowed to restart your journey somewhere besides Pittsburgh. Your teacher has this information.

5. Have your worksheet beside the computer. Each time you reach a new place, write on your paper the name of the place, the number of miles and the direction of travel, and anything that happens to you there. After each event put a + if the event or person was helpful or a - if it was harmful. You will use this information later.

6. Follow the simulation to Losantiville, or as far as you can survive. There are 26 locations along the trek.

T6. The computer program includes some random events that may send students back to the beginning of the program (Pittsburgh). Table TG1 lists these events and the probability of their happening. If too many of the events befall a single group they may become frustrated and their learning may be slowed. To rescue them, note in TG1 where the various Trek segments begin. Find the Trek (III, IV, V) that they are working on, and tell them that you will act as a friendly settler and give them a wagon ride back to _____. There they can resume their river travels with a new flatboat.

To interrupt the program and send students only part way back after a disaster, hold the CONTROL key down and tap the RESET button. When you get the Basic cursor [, type **RUN TREK III**, or another trek you need. It may take two taps of CONTROL RESET to get the cursor. Be sure to use the proper Roman numeral for the trek needed. If necessary, students can be told how to get into the different trek segments. Most, however, will persist without help as in a video game.

7. Compare your chart with others in your class. Did more good things happen for you or more bad things? How many people in the class reached Losantiville? What was to blame for more harmful factors -- humans or nature? Which was more helpful?

T7. The charts will vary because not all events happen to all players, and even those that do occur for everyone may have different results. Discuss in class how events occurred differently for different groups.

8. Marine mammals use echo location to identify objects and their positions in the water. How did flatboaters use echo location?

T8. At night they would thump on the side of the boat and wait for an echo off the bank. The sooner the echo returned, the closer they were to the bank, and they would have to turn quickly to avoid running aground in the dark. Like whales, they could steer by this method.

9. Use the library to find out more about some famous people you met on your river trek: Simon Kenton, Chief Logan, Mike Fink, the pirates, the Indian tribes of the region. How were these people important to Ohio history? How did they affect river travel?

T9. Table TG1 identifies sites along the route and some important things to know about them and about the computer program at those points. For less capable students, write in the names of the locations on the Worksheet in advance. Use history books to find more information.

Table TG1. Location and importance of sites along the Ohio River.

LOCATION	IMPORTANCE
1. Pittsburgh	Allegheny & Monongahela Rivers join to form the Ohio. **Trek II** begins in the computer program sequence. **Trek I** was the introduction to the program.
2. Dead Man's Island	**Decision Point.** Island will be visible 50% of time. Attempts to navigate around it will always fail. Wait for the water to rise. This sequence illustrates how waters of the Ohio River fluctuated drastically, making navigation treacherous.
3. Beaver River	Site of Fort McIntosh where the Treaty of 1785 was signed, defining Indian lands from the Cuyahoga River westward. Note peeling bark of sycamore tree. **Begin echo sounding.** Press S to beep, and listen for an echoing beep. Whenever your beep is echoed quickly, press L to turn. It does no good to keep frantically pressing S and L without listening for echo beeps. The computer provides for four to six turns at random time intervals. Sounding may continue for one minute or longer.
4. Little Beaver Creek	Seneca oil oozes from a natural spring. (See Ohio Sea Grant's "Oil Spill!" activity for effects of oil on water resources.) Border of Ohio territory and Pennsylvania, the second state to join after the original 13 states in the United States (1787).
5. Yellow Creek	Chief Logan's village was located on this creek, a few miles above the mouth. Here his father, brother, sister and brother-in-law were brutally slain by Jacob Greathouse in 1774. (The Frontiersmen, by Allan W. Eckert, 1967)
6. Fort Steuben	An outpost in the Seven Ranges district of the Ohio Territory, site of present Steubenville, OH.
7. Mingo Bottom	Known for potential as future farmland. Territory occupied by the Mingo tribe under Chief Logan in the 1770s, and now known as Mingo Junction.
8. Charlestown, VA	Not the present Charleston, WV. Probably near Wellsburg, WV. Supplies are bought: lard, corn meal, salt pork. Pillory for punishment of drunkenness in public. Mouth of Buffalo Creek.
9. Wheeling Island	Site of Zane's Station and the eastern end of Zanes's Trace in Later years. **Decision Point.** Steer left to avoid more snags in the river. By steering right, the boat is damaged, and the delay of 2-4 days results in attack by river pirates 50% of the time.
10. Little Grave Creek (Moundsville)	Site of mound, presumably from the Adenas. **Trek III** begins here.
11. Squatter's cabin	Not a town, but a type of settlement. Canoes are carrying troops across the river.
12. Long Reach	A long stretch of water with five islands. Storm will sink some boats (50% of time).

13. Campus Martius	An impressive 2-story walled fort near Fort Harmar (1788). Present site of Marietta, OH. **Decision Point.** Visit the doctor to avoid smallpox later.
14. Belle Prairie	Mouth of Little Kanawha River; present site of Belpre, OH. Indians attack stockade; 80% of time the player will survive.
15. Devil's Hole	**Decision Point.** Potential ambush by Indians or pirates. Ignoring the girl's pleas will save the player, but the girl will be scalped because she was not helped. If player decides to rescue her, there is a 50% chance that all the player's family will be killed by pirates.
16. Letart's Falls	Rock appears in midstream. The player passes the falls safely. If the player did not get vaccinated he/she will die at this point.
17. Salt Springs	Salt is made by evaporating brine. Trade West Indies sugar for salt. **Trek IV** segment begins.
18. Point Pleasant	Halfway point. Probably named by Simon Kenton in 1773 because he was rescued from Indians there. Present site of Pt. Pleasant, WV. Find a metal plate left by Celeron in 1749. Trade a spare rifle for bullets.
19. Gallipolis	City of the Gauls, a log cabin settlement of Frenchmen lured to America by promises of "a free land for free men." Present Gallipolis, OH.
20. Big Sandy River	
21. Hanging Rock	Sandstone cliffs over the Ohio River. Used by Indians to watch movements of white settlers on the river. Present site of Hanging Rock, OH.
22. Old Shawnee Town	Established as Portsmouth, OH, in 1804 by Nathaniel Massie, who also built the present Chilicothe. A buffalo is skinned. Buffalo were growing scarce by this time in Ohio because of overhunting by white settlers. Hear the story of Mary Ingles and rumors of Blue Jacket.
23. Whirpool	On the way to Mossey's Island, a whirlpool appears; 20% of the time the boat will sink and everyone will drown. If the player escapes, the next step is to go ashore to hunt. Four bullets are available, and all must be used. (Shoot 3 animals to get enough food for the family. Aim at the animals' heads. Do not shoot at the eyes in the bushes. Indian has many friends nearby!)
24. Mossey's Island	Keelboat seen, being pulled upstream by 12 men. Mike Fink is on board. **Trek V** begins.
25. Limestone, KY	Oldest settlement on the Ohio River, founded by Simon Kenton at the mouth of Limestone Creek. Kenton greets your party as he did hundreds of incoming settlers. This town was incorporated by the Northwest Ordinance (1787) as Maysville, KY, for John May. Players have "an old map" that still says Limestone on it. Troops from Fort Washington will escort your boat to Losantiville.
26. Losantiville	Many boats and buildings, plus blockhouses for protection from Indians, make up the town. It was named in 1787 by surveyor John Filson as L'os-anti-ville, city opposite the mouth (of the Licking River). Renamed Cincinnati by Gov. Arthur St. Clair in 1790, for the Society of Cincinnatus. The Governor is at Fort Washington getting ready to march against Blue Jacket and the Shawnees. Feast on wild turkey and watercress, and square dance to fiddle music. Some trade flatboat lumber for wagons to go on.

For further information about the people, place and events of this period, see Allan W. Eckert, The Frontiersmen. Boston: Little, Brown and Company, 1967.

ACTIVITY B: CAN YOU DRAW A MAP OF THE OHIO RIVER AS IT WAS IN 1789?

Before students start graphing, have students cut off the "ruler" at the edge of their graph paper. The ruler has the scale of 5 miles to one square.

Watch students carefully to see that they are using their paper rulers correctly, lining them up in the correct compass direction and counting off one square for every five miles. The resulting graphed line will resemble the southern and most of the eastern border of Ohio. Correct points are shown on the next page.

There were rough maps of the Ohio River by the time you went down it in 1789. Could you draw a map for the emigrants who might have followed you? It might help them to know how far it is to the next town, or where they might find food in the woods.

MATERIALS: Graph paper, pencil, 4" strip of graph paper to use as a ruler, transparent compass rosette.

PROCEDURE

In this activity you will use the distances and directions recorded in Activity A to draw a map of a section of the Ohio River.

1. Turn your graph paper so that the long side is next to you. Find the mark on the right hand edge of the squares. This is Pittsburgh, your starting place.

2. Cut off the "ruler" at the edge of your graph paper. this ruler has the scale of 5 miles to one square.

3. On the graph page is a compass rosette that includes all the directions given in the simulation. Each time you mark a new point along the River Trek route, line up your ruler with the proper compass direction. You may wish to make a transparent rosette that you can move around on the graph.

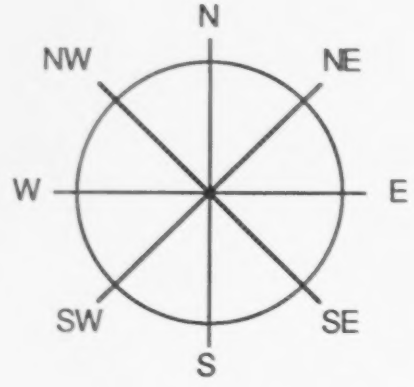
4. Now take the first set of distances and compass directions you recorded in Activity A: 15 miles WSW. Place your paper "ruler" so that it touches the Pittsburgh point and lies in the correct compass direction for your first travel.

5. Let each square on the ruler stand for 5 miles. Count along the ruler from Pittsburgh a total of 3 squares to stand for 15 miles. Make a second point on the graph this distance and direction from Pittsburgh.

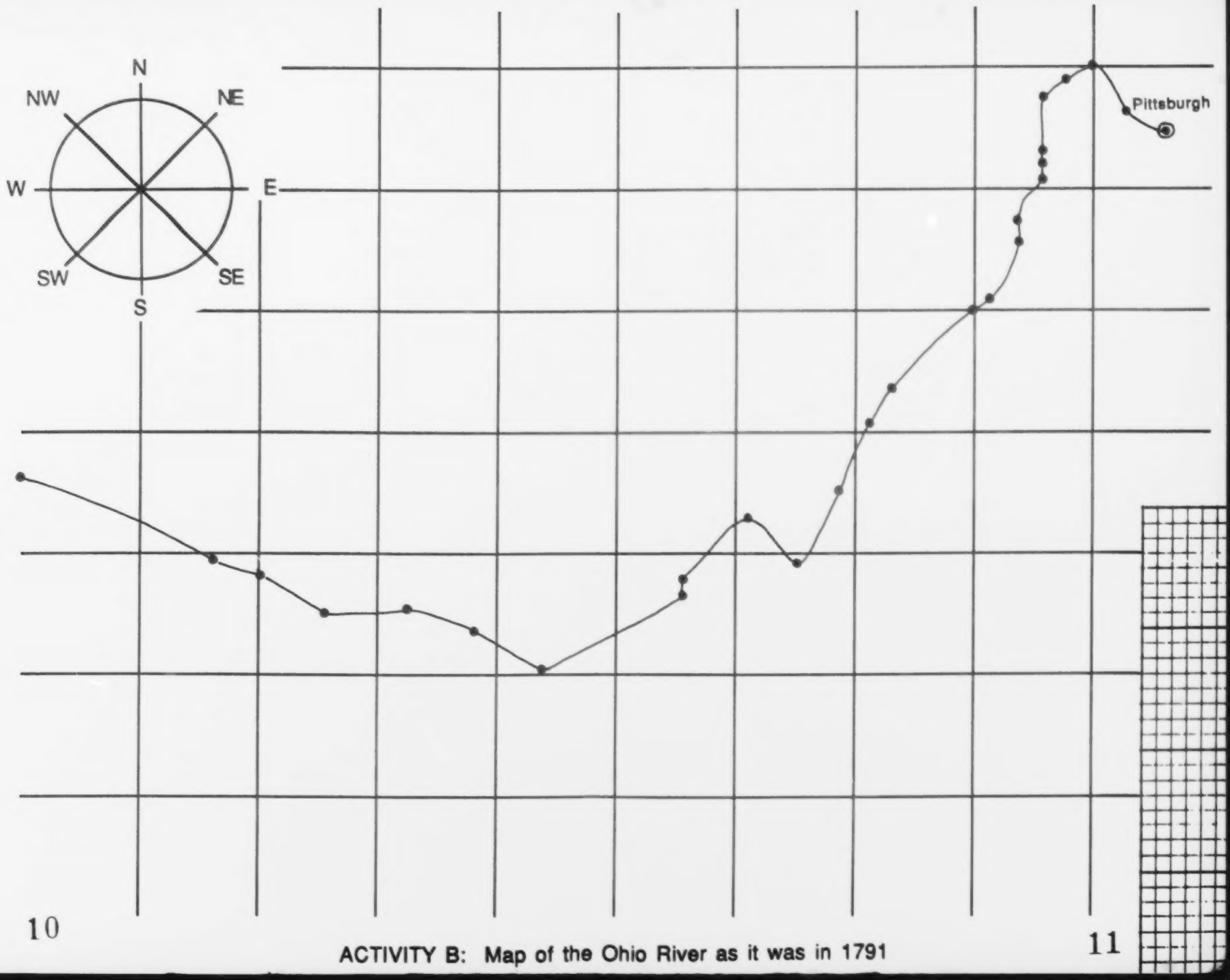
6. Use the new point as the starting for the next measurement. Line up your ruler in the right compass direction, count off the miles, and make a third point.

7. Continue plotting points and labelling them until you reach the point for Losantiville. If you did not reach Losantiville in the simulation, borrow the information you need to complete the map.

8. Connect the points with a smooth line when you are finished. You should be able to recognize the outline of the southern boundary of Ohio and the northern panhandle of West Virginia.



Compass rosette: You may wish to make a transparent one for each student to use in Activity B.



ACTIVITY B: Map of the Ohio River as it was in 1791

ACTIVITY C: WHAT ARE THE NAMES OF MODERN TRIBUTARIES AND TOWNS ON THE OHIO RIVER?

The world is always changing, and the Ohio River today is not like the one in the flatboating simulation. There is a series of locks and dams that keep the river deep so it does not dry up in some seasons. It flows at a fairly steady rate, without rapids and whirlpools. River traffic consists of huge barge trains and many pleasure boats.

The names of the towns and the tributaries are different too. What do today's boaters call the places you passed in the River Trek?

MATERIALS: Graph constructed in Activity B, tracing paper, road map of Ohio and the northern panhandle of West Virginia.

PROCEDURE

1. Place a sheet of tracing paper over the graph you made in Activity B. Trace the outline of the Ohio River and mark the main tributaries. Put dots where there are towns.

T1. Instead of retracing the map some teachers prefer to have students number the original points in Activity B, and write the modern names in this activity.

2. Compare your tracings with a road map. Find the tributaries you marked and write along them their modern names. What is the modern name of the Elk's Eye River? Little Grave Creek? Their original names were given by the Indians.

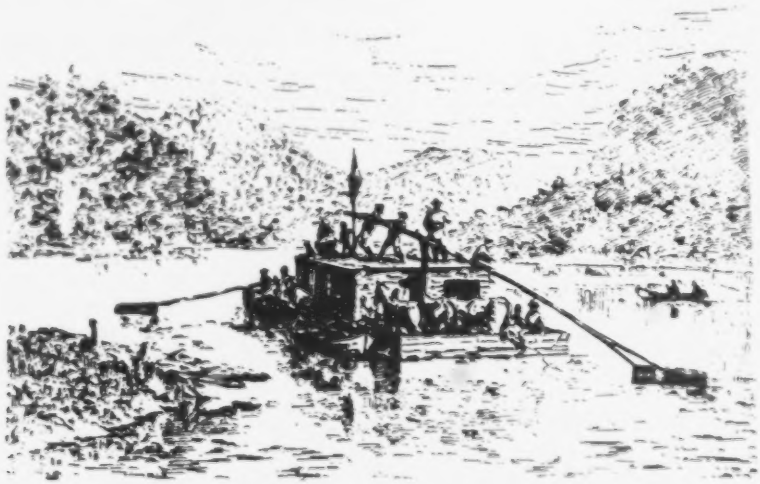
T2. Remind students that they are only concerned with the Ohio River region. Some may look all over the map for the cities. They may also try to consult the map's index. It is more efficient to follow the Ohio River from east to

3. Write in the modern names of the towns along the river. What is the name of Belle Prairie? Losantiville? Are there some towns that have the same names as in 1789? List them on your worksheet.

T3. Modern names are given in the chart in Table TG1. Elk's Eye River is now the Muskingum River; Little Grave Creek is near Moundsville, WV. Belle Prairie is Belpre, Ohio; Losantiville is Cincinnati, Ohio. Towns with the same modern names as in the River trek are Point Pleasant, Hanging Rock, Pittsburgh, and Gallipolis.

4. Of course the names are not the only things that have changed on the Ohio River. The history of the region is full of exciting stories. Working with a team of students, do some library research and report to the class on how one of the following has changed since the days of the flatboat:

Campus Martius	smallpox prevention
Limestone, KY	Pittsburgh
Portsmouth, OH	Gallipolis
Charlestown	Wheeling



ACTIVITY D: BUILD A FLATBOAT

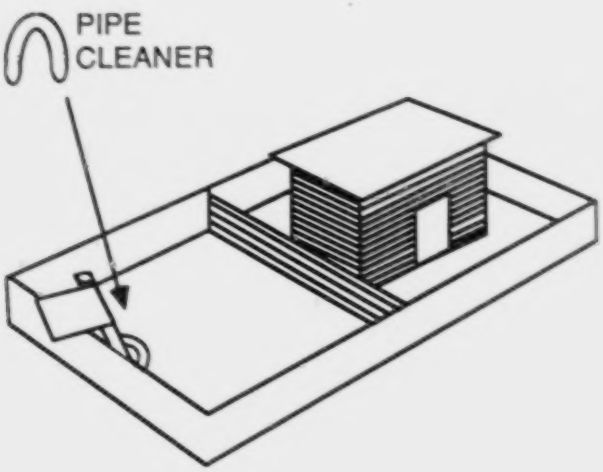
This would be a good extension activity to do with younger children. This only appears in the teacher guide so copies would be needed for the children.

In this activity you will make a flatboat like the ones you have been reading about. Simply follow the instructions and add any ideas you might think of that the people travelling on flatboats would need.

MATERIALS: construction paper, popsicle sticks, or straws (for the log cabin), shoebox lid, glue, straws, paper, pipe cleaners, paint.

PROCEDURE

1. Make a small log cabin and glue it inside of the shoebox lid. This can be done using construction paper, popsicle sticks or straws. It would be a good idea to paint this before gluing to the lid.
2. Use the straws to make a fence going across the middle of the lid.
3. To make the steering oar cut a piece of paper three inches wide and three inches long. Fold this piece of paper in half and put glue on one side of the inside. Place a straw on this glue and fold the paper around the straw.
4. Bend a piece of pipe cleaner into a "U" shape. Glue this at one end of the boat to make the oar lock.
5. Finish painting the flatboat and add any extra designs you may wish to. An example would be to make some people or animals to put on the boat.



Example of what your flatboat should look like.

REVIEW QUESTIONS

1. Describe the human factors that affected flatboat travel in the 18th Century on the Ohio

R1. Human factors with positive effects included encounters with helpful people (like Simon Kenton) and traders with goods the travelers needed. Negative human factors were Indian attacks, pirates and communicable diseases. Marksmanship in hunting was either positive or negative, depending on skill.

2. Describe how the forces of nature affected flatboat travel.

R2. Natural forces that helped the flatboaters were high water and abundant game. There were many problems created by nature: low water, darkness, heavy storms, and the whirlpool are examples.

3. Name three states that are bounded by the Ohio River.

R3. West Virginia, Pennsylvania and Ohio are the ones in the River Trek. Others are Kentucky, Indiana and Illinois.

4. Discuss some of the changes that have occurred in the Ohio River region since the days of the flatboats.

R4. Water levels are controlled by dams, and there is a very slow current except after storms. Pleasure boating and barges transporting goods make up most of the traffic on the river. Students may do library research on the sites on the Trek or the class could correspond with students in the river region.

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Evaluation Items

1. Flatboats are made of _____ .

   a. logs
   *b. wood planks
   c. iron
   d. birch bark

2. Travellers depended on _____ to move their flatboats down the river.

   *a. the current
   b. engines
   c. the wind
   d. rope

3. How long were typical flatboats on the Ohio River?

   a. 30 feet
   b. 50 feet
   *c. 40 feet
   d. 60 feet

4. How did flatboaters steer in the dark?

   a. They used lanterns to see better.
   *b. They pounded the sides of the boats and listened for echoes.
   c. They travelled only during the day.
   d. They looked for bonfires along the bank.

5. Which of these were <u>not</u> a danger to flatboaters?

   a. smallpox
   b. Indian attacks
   c. whirlpools
   *d. steamboat traffic

6. Where do the Allegheny River and the Monongahela River meet?

   a. Losantiville
   b. Old Shawnee Town
   *c. Pittsburgh
   d. Belle Prairie

7. What is the modern name of Old Shawnee town?

   *a. Portsmouth
   b. Pittsburgh
   c. Wheeling
   d. Cincinnati

8. What is the modern name of Losantiville?

   a. Portsmouth
   b. Pittsburgh
   c. Wheeling
   *d. Cincinnati

9. Which of these states is <u>not</u> bounded by the Ohio River?

   a. West Virginia
   *b. New York
   c. Ohio
   d. Kentucky

10. In about what general period of history were flatboats an important method of transportation in Ohio?

    a. late 1800s
    *b. late 1700s
    c. late 1600s
    d. late 1900s

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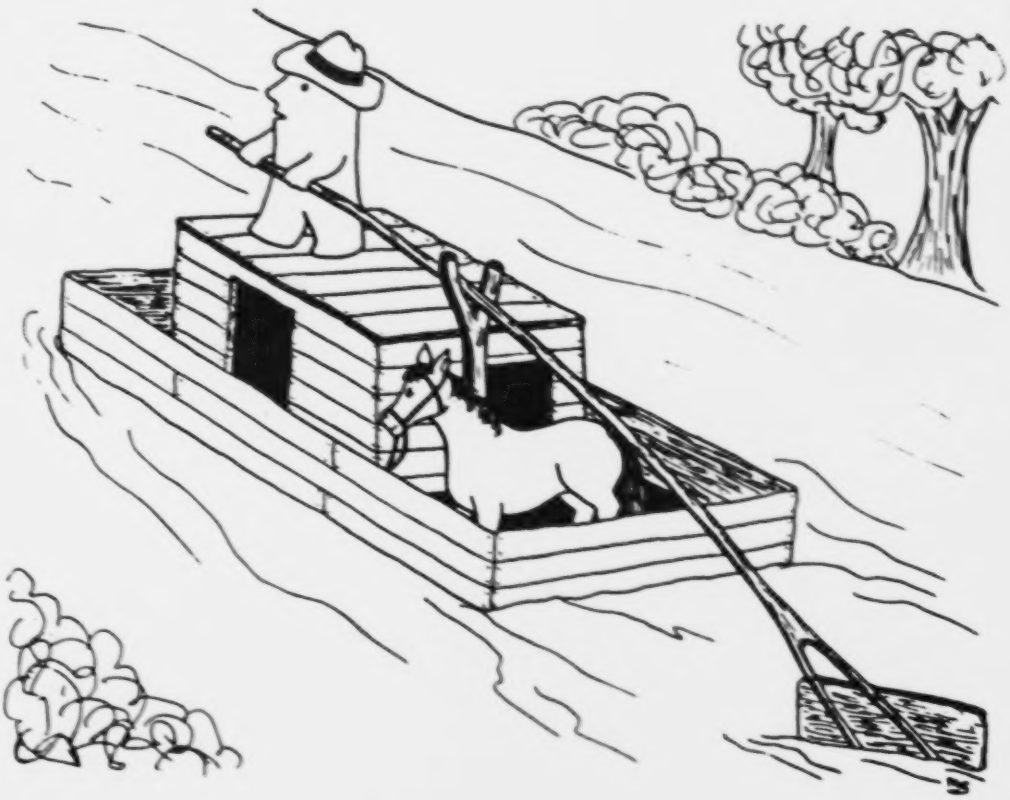

OEAGLS–Oceanic Education Activities for Great Lakes Schools

SE 048 328

OEAGLS Investigation #26

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Portions of the text were developed by Kimberly Wile, Marietta, Ohio.

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RIVER TREK

by

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Computer simulation by Christopher N. Fortner
Ohio Sea Grant Education Program

INTRODUCTION

Ohio's two natural waterways, the Ohio River and Lake Erie, formed transportation routes into the Northwest Territory. Early pioneers and scouts came to this region by canoes. However, the canoe was unable to meet the needs of families emigrating to the Ohio region. In addition to family members, emigrants needed to transport livestock, seeds, plows, tools and other necessities for starting a new home. Flatboats became the most popular form of transportation during the late 1700s and early 1800s.

Flatboats were built of wood planks held together by pegs. The typical size flatboat was 40 feet long, 12 to 14 feet wide, with sides 2 to 4 feet high. Flatboats usually had a building on them with the front part housing the family and the rear portion housing the animals. The boats were designed for a one-way journey. When the emigrants arrived at their destination, the lumber was used to build a shelter for the family.

There were no engines in flatboat days. Moving down the river depended on the river's current. Since the Ohio River during this time was quite shallow, emigrants would wait for early spring floods to carry them downstream. Most flatboats contained only a long pole or **sweep** with which to steer. The sweep was about 20 feet long. If the flatboat got stuck on a sandbar, a **hawser** or strong rope was used in addition to the sweep. The hawser was attached to a tree on shore while a reel on board the boat wound in the rope. As the rope was wound up shorter and shorter, the boat was pulled off the sandbar and toward the shore. If the hawser failed or no trees were within reach, the boat remained stranded until a strong current could lift it away.

What other kinds of perils did the flatboaters face in the 18th Century? Could you have survived a river trek during that period? What was going on in Ohio during the time of the flatboat? How have the areas along the Ohio River changed since flatboat days?

OBJECTIVES

When you have completed this activity you will be able to:

1. List the natural and the human factors that determined whether a flatboat family survived a river trek in 1789.
2. Use compass directions and distances to plot a map of the Ohio and West Virginia portions of the Ohio River.
3. Describe some events and people important to Ohio's history in the late 1700's.
4. Identify the modern names of towns and tributaries along the Ohio River.
5. Follow directions carefully to complete a computer game.

ACTIVITY A: WHAT WAS A FLATBOAT TRIP LIKE?

Did you ever dream of building a raft and setting off on an adventure down the river the way Tom Sawyer did? What would you take with you? What dangers would you face? Could you make the quick decisions necessary to survive?

In this activity you will take a computer-simulated trip down the Ohio on a flatboat in 1789. Some of the people, events and natural elements you face will be a real challenge, just as they were in the flatboat days. Good luck and smooth sailing!

MATERIALS: River Trek disk, Apple][computer with one disk drive, color monitor, pencil and paper.

PROCEDURE

1. Up to four people may work together at one computer. You can also do the simulation alone. Get the River Trek disk from your teacher and put it, label side up, into the disk drive. Close the door of the drive. If your computer has two disk drives, use only Drive 1.

2. If you have an Apple][e or][c, push the CAPS LOCK key down. Read instructions 3-6 below before you begin the simulation.

3. Boot the disk. It will take about a minute to load the program into the computer's memory. Read the introductory screens carefully to find out what the simulation is about and how to begin.

4. On the screens that have pictures, you will have instructions and information just below the picture. Unless you are told to do differently, press the RETURN key to get a new screen and continue the simulation.

There is no way to go back to screens you have already passed. Your flatboat has no motor, and going upstream is nearly impossible with only your sweep for power. Flatboaters who wanted to go back to a town they had passed would have to pole to shore and walk. After some events in the trek you may be allowed to restart your journey somewhere besides Pittsburgh. Your teacher has this information.

5. Have your worksheet beside the computer. Each time you reach a new place, write on your paper the name of the place, the number of miles and the direction to travel, and anything that happens to you there. After each event put a + if the event or person was helpful or a - if it was harmful. You will use this information later.

6. Follow the simulation to Losantiville, or as far as you can survive. There are 26 locations along the trek.

7. Compare your chart with others in your class. Did more good things happen for you or more bad things? How many people in the class reached Losantiville? What was to blame for more harmful factors -- humans or nature? Which was more helpful?

8. Marine mammals use echo location to identify objects and their positions in the water. How did flatboaters use echo location?

9. Use the library to find out more about some famous people you met on your river trek: Simon Kenton, Chief Logan, Mike Fink, the pirates, the Indian tribes of the region. How were these people important to Ohio history? How did they affect river travel?

ACTIVITY B: CAN YOU DRAW A MAP OF THE OHIO RIVER AS IT WAS IN 1789?

There were rough maps of the Ohio River by the time you went down it in 1789. Could you draw a map for the emigrants who might have followed you? It might help them to know how far it is to the next town, or where they might find food in the woods.

MATERIALS: Graph paper, pencil, 4" strip of graph paper to use as a ruler, transparent compass rosette.

PROCEDURE

In this activity you will use the distances and directions recorded in Activity A to draw a map of a section of the Ohio River.

1. Turn your graph paper so that the long side is next to you. Find the mark on the right hand edge of the squares. This is Pittsburgh, your starting place.

2. Cut off the "ruler" at the edge of your graph paper. this ruler has the scale of 5 miles to one square.

3. On the graph page is a compass rosette that includes all the directions given in the simulation. Each time you mark a new point along the River Trek route, line up your ruler with the proper compass direction. You may wish to make a transparent rosette that you can move around on the graph.

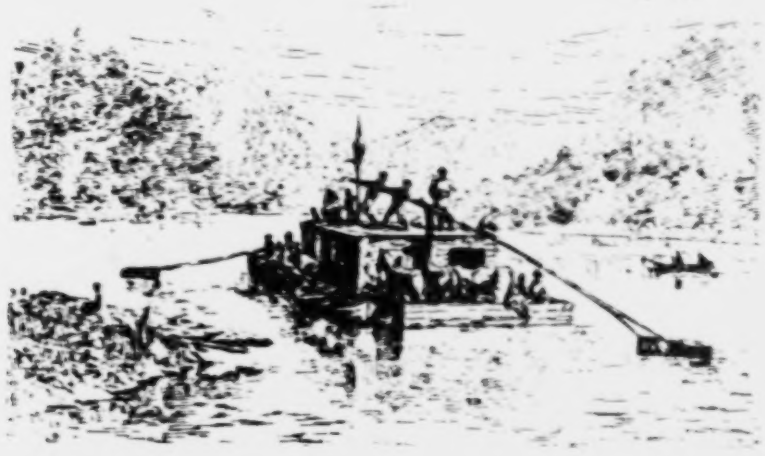
4. Now take the first set of distances and compass directions you recorded in Activity A: 15 miles WSW. Place your paper "ruler" so that it touches the Pittsburgh point and lies in the correct compass direction for your first travel.

5. Let each square on the ruler stand for 5 miles. Count along the ruler from Pittsburgh a total of 3 squares to stand for 15 miles. Make a second point on the graph this distance and direction from Pittsburgh.

6. Use the new point as the starting for the next measurement. Line up your ruler in the right compass direction, count off the miles, and make a third point.

7. Continue plotting points and labelling them until you reach the point for Losantiville. If you did not reach Losantiville in the simulation, borrow the information you need to complete the map.

8. Connect the points with a smooth line when you are finished. You should be able to recognize the outline of the southern boundary of Ohio and the northern panhandle of West Virginia.



ACTIVITY C: WHAT ARE THE NAMES OF MODERN TRIBUTARIES AND TOWNS ON THE OHIO RIVER?

The world is always changing, and the Ohio River today is not like the one in the flatboating simulation. There is a series of locks and dams that keep the river deep so it does not dry up in some seasons. It flows at a fairly steady rate, without rapids and whirlpools. River traffic consists of huge barge trains and many pleasure boats.

The names of the towns and the tributaries are different too. What do today's boaters call the places you passed in the River Trek?

MATERIALS: Graph constructed in Activity B, tracing paper, road map of Ohio and the northern panhandle of West Virginia.

PROCEDURE

1. Place a sheet of tracing paper over the graph you made in Activity B. Trace the outline of the Ohio River and mark the main tributaries. Put dots where there are towns.

2. Compare your tracings with a road map. Find the tributaries you marked and write along them their modern names. What is the modern name of the Elk's Eye River? Little Grave Creek? Their original names were given by the Indians.

3. Write in the modern names of the towns along the river. What is the name of Belle Prairie? Losantiville? Are there some towns that have the same names as in 1789? List them on your worksheet.

4. Of course the names are not the only things that have changed on the Ohio River. The history of the region is full of exciting stories. Working with a team of students, do some library research and report to the class on how one of the following has changed since the days of the flatboat:

Campus Martius	smallpox prevention
Limestone, KY	Pittsburgh
Portsmouth, OH	Gallipolis
Charlestown	Wheeling

REVIEW QUESTIONS

1. Describe the human factors that affected flatboat travel in the 18th Century on the Ohio River.

2. Describe how the forces of nature affected flatboat travel.

3. Name three states that are bounded by the Ohio River.

4 Discuss some of the changes that have occurred in the Ohio River region since the days of the flatboats.

Name _____

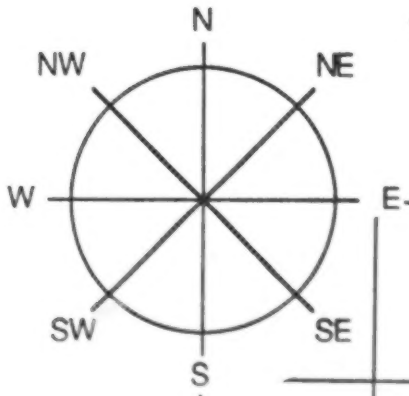
WORKSHEET

RIVER TREK

ACTIVITY A: WHAT WAS A FLATBOAT TRIP LIKE?

Events of the Trek

Location	Miles from last location	Direction from last location	Event or problem (+ or -)



Pittsburgh

ACTIVITY B: Map of the Ohio River as it was in 1791

1-6. Follow directions.

7. Did more good things or more bad things happen to you? _____

How many in the class reached Losantiville? _____

Which were more harmful, human or natural events? _____

Which were more helpful, human or natural events? _____

8. How did flatboaters use echo location? _____

_____

ACTIVITY C: WHAT ARE THE NAMES OF MODERN TRIBUTARIES AND TOWNS ON THE OHIO RIVER?

1. Follow directions. Put your name on the new map.

2. What is the modern name of Elk's Eye River? _____ Little Grave Creek? _____

3. What is the modern name of Belle Prairie? _____ Losantiville? _____

List towns that have the same name as in 1789. _____

Review Questions

1. Describe the human factors that affected flatboat travel in the 18th Century on the Ohio River. _____

_____

2. Describe how the forces of nature affected flatboat travel. _____

_____

3. Name three states that are bounded by the Ohio River. _____, _____,

_____.

4. Discuss some of the changes that have occurred in the Ohio River region since the days of the flatboats.

_____

_____

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